In the Forefront

TEL-MED

A Public Medical Information Service by Phone

Call a Number, Ask about a Disease, Listen to a Taped Reply Provided by the County Medical Society

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AUTHORITATIVE INFORMATION on a wide range of diseases—including many on which misinformation can be disastrous—is available to anyone in the San Bernardino-Riverside area who will place a phone call to an advertised number and listen to tape recordings in English or Spanish on the subjects requested.

The San Bernardino County Medical Society has made the tapes and provided an operator who plays the recordings asked for by the caller, who remains anonymous. Use of the service began instantly upon announcement of it and publication of the telephone number. There are more than 150 inquiries a day.

A library of taped messages 3 to 6 minutes long is maintained at the San Bernardino County Medical Society offices. Tapes cover a wide range of subjects from birth control to venereal disease. People desiring information dial the toll-free phone number. An operator is on duty from 9 A.M. to 8 P.M. weekdays and 10 A.M. to 6 P.M. on Saturday. He handles ten phone lines on a rotary system with tape playback devices for each line. The caller can request a tape by index number, title or subject classification. The operator plugs in the tape which then plays over the phone to the caller and automatically disconnects at the end of the message. More than

The public response is one of unqualified enthusiasm and support. The worried young woman can learn the signs and symptoms of pregnancy and, if needed, learn about therapeutic abortion and how to get one. The frightened teenager can learn about venereal disease and how to get free diagnosis and treatment. Concerned parents can obtain the facts about drug abuse and further advice on dealing with their teenagers. The elderly concerned about failing hearing and vision, the bride worried about feminine hygiene, the woman afraid of cancer, the man fearful of high blood pressure and heart disease-in short all classes of the population old enough and intelligent enough to dial a phone can now call in to get the basic information they need to allay groundless fears, dispel mythical old wives' tales and focus on the pertinent aspects of a disease process.

Emphasis is primarily on prevention or early detection and only secondarily on treatment. Sources of further information on how to obtain diagnosis and treatment are provided when pertinent. Moreover, the information bears the approval of their own county medical society. The public relations value to physicians is immeasurable.

In an age when physicians and organized medicine often find themselves forced into a defensive posture by wild charges of failing to meet

^{400,000} people have access to this system by a toll-free phone call. This is the TEL-MED project.

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the public needs, the TEL-MED project emerges as a bold, innovative outreach to the public—a concrete positive demonstration of the physicians' effort through the medical society to provide, free of charge, the information to help maintain health, recognize early signs of significant illness and to get help. For those with chronic illness such as diabetes and heart disease it provides information for the individual and his family on how to adjust to the illness.

In addition to the public relations value, the project has other benefits for the physician and other health care providers. Tel-Med guides the public to proper utilization of available facilities. The taped messages readily supplement physician and staff counselling for patients and their families. In short, Tel-Med has forged a new link of communication between physicians and the public to the benefit of both.

History

The TEL-MED concept was the brain child of the project director, Mr. Raymond Saar, a former aerospace engineer. He recognized the validity of the telephone information retrieval system as an effective and economical means of disseminating information. The applicability to health information was readily accepted.

Mr. Saar effectively presented his concept and the project was funded for a one-year pilot program starting October 1971. Regional Medical Programs Area VI contributed \$24,500 and California Medical Education Research Foundation (CMERF) gave \$10,500. The San Bernardino County Medical Society has contributed about \$11,000 to bring this to fruition. The original project hoped to develop a library of 50 tapes the first year.

As a pioneering project, no guidelines or past experience were available to aid us. A steering committee was formed, yielding a relatively small but highly dedicated and productive group which pushed the project forward.

A visit to the University of Wisconsin medical tape service by Mr. Saar provided valuable insight into the only related service known to us. The library there, however, consists of tapes geared to continuing education of physicians and nurses instead of the general public.

Myriad problems cropped up in every facet of this complex undertaking, but solutions were found and needed guidance and assistance was generously provided from a broad range of technical and cultural sources.

Through systems engineering techniques, various facets of the program were developed simultaneously. Questionnaires were sent to hundreds of health service agencies, physicians and educators to establish priorities for subjects to be covered. In addition appropriate authors and sources of information were identified.

Surveys were conducted among high school and college students and a wide range of community social and service clubs to establish the areas in which the public most desired information.

Meanwhile the necessary play-back equipment was evaluated, purchased, partly built by Mr. Saar and installed. A ten-line rotary phone system was then married to our equipment.

After the subjects were determined upon, script development began. It became apparent that special techniques are involved in bringing complex medical concepts, such as relationship of blood pressure to atherosclerosis, to a level readily comprehended by the person who reads at an 8th grade level. Scripts authored by physicians are reviewed by lay workers who partly rewrite to clarify and simplify. Scripts are then separately revised by the project director and the medical director—often with much communication back and forth from all involved. The script is then ready to be recorded.

The tapes are recorded by professionals. The narrator is selected for qualities compatible with the subject—for example, a young woman for tapes on pregnancy and birth control, an older man for a tape on glaucoma. Experienced radio and TV performers have generously given their services—often offering even further refinements to the script.

The finished tape is then played to a review committee of physicians from the San Bernardino County Medical Society. This committee has final authority on placing the tape in the library for the public. About 5 percent of the tapes have been further revised or rejected at this final hurdle.

To serve fully the population of our area, the entire library is being duplicated in Spanish. The final version of the English script is translated by skilled laymen. Bilingual physicians provide the final review for the medical society and bilingual narrators record the tape.

Preliminary trials of the system were conducted in March of 1972 to validate operational readiness. When these proved successful, the first area-wide news releases went out on April 7 with a library of 35 tapes. The public response was overwhelming. The next day over 1200 calls were logged. During the ensuing 14-week period 15,995 calls were received. With the steady addition of new tapes the library approaches 100—double the first year's projected goal.

Continuous evaluation of the system is important. The number of calls to each line is logged daily. The number of requests for each tape is similarly noted. Rough estimates by the operator of age and sex of caller are compiled. During slack periods staff members also come on the line at the end of the message to interview the caller. In this manner we can check to see if the caller's needs have been met by the tape. Areas of ambiguity or insufficiency can be identified. Review and revision of scripts at least once a year is planned. More sophisticated methods of evaluating public and professional response are to be put into use.

The validity of this concept having been established in the pilot project, what of the future? The potential for this system is as vast as the need. Currently we are seeking grants to further

develop and expand this program. Our project has generated great enthusiasm among other potential users such as the welfare department, county health departments, hospitals, police, probation, fire, and a broad spectrum of public service agencies who would like to provide similar services. The economy and efficiency of the TELMED approach cannot be matched by any other system. Such supplementary users at a modest fee could sustain the health information portion at no further cost. Special tapes for individual physicians or groups could also be developed for a nominal fee.

Currently we are applying for a three-year operational grant. This will provide for a library up to 1000 tapes. It will further establish a TEL-MED center in the Victorville-Apple Valley area to test the program in a rural area. A program such as ours also will be set up in San Diego through the San Diego County Medical Society and Area VII Regional Medical Programs to evaluate the system in a large metropolitian area. More sophisticated analysis of every aspect of the program and its impact will be conducted. With this we hope to establish a self-sustaining, ongoing program and to be able to advise other county medical societies that may wish to set up such a system.

CANCER FELLOWSHIPS

Postgraduate Fellowships in cancer for practicing physicians are available at the University of Southern California School of Medicine and the Los Angeles County-University of Southern California Medical Center. These Fellowships are sponsored by the National Cancer Institute, are of one month's duration and carry a stipend of \$750. Separate programs are available in gynecological oncology, medical oncology, radiation therapy, tumor pathology and tumor surgery. Applicants should be Board eligible or Board certified and should submit a résumé of their professional background to Arthur J. Donovan, M.D., Program Director, Cancer Training Program, School of Medicine, University of Southern California, 2025 Zonal Avenue, Los Angeles, California 90033.